Pages from IPw-TX4 User Manual

IPw-Tx4 is a 4 channel MPEG4 Video Server and is IE browser compatible.

It encodes analogue signals of traditional cameras to digital signals; user can monitor real-time video via IE browser. MPEG4 compression format supports smooth video quality. Also, it supports USB backup. 2-way audio supports the user to have a video conference. In addition, the user can control IPw-TX4 with an easy-control user interface via IE browser.

I. Product Specifications

- MPEG4 compression format.
- USB backup.
- Wireless network connection (802.11 b/ g).
- 2-way audio.
- Online firmware upgrade.
- Support dynamic IP and PPPoE through free DDNS.
- Support AVI video backup via IE browser.

Hardware	
CPU	ARM 9 ,32 bit RISC
RAM	64MB
ROM	8MB
Video Input	BNC x 4
Input Video Looping	BNC x 4
Audio Input	RCA x 1
Audio Output	RCA x 1
Alarm Input	X4
Relay Output	X1
Network	
Ethernet	10/ 100 Base-T
Wireless	802.11b/g

WEP	64/128 bit
Network Protocol	HTTP, TCP/ IP, SMTP, FTP, PPPoE, DHCP, DDNS, NTP
System	
Video Resolution	VGA CIF QCIF
Video adjust	Brightness, Contrast, Saturation, Hue
Image snapshot	Yes
Full screen monitoring	Yes
Compression format	MPEG-4
Video bit rate adjust	CBR, VBR
Motion Detection	Yes, 4 Areas(1 Area per CH)
Triggered action	Mail, FTP, Save to USB USB Storage
Security	Password protection
Firmware upgrade	HTTP mode, can be upgraded remotely
Simultaneous connection	Up to 10
Audio	Yes, 2-way
SD card management	
Recording trigger	Motion Detection
Video format	AVI/ MPEG4
Video playback	AVI File Download
File Management	Yes, can be deleted or overwrite
Web browsing requirement	
OS	Windows 2000, XP, 2003
Browser	IE 6.0 or above

II. Product Installation

A. Hardware Installation

i. Connect the power adapter and Ethernet cable.
ii. Set up the network configuration based on different environments. For further information, please refer to chapter IV Network Configuration.

B. IP Assignment

i. Use “IP Installer”, comes with CD, to assign the IP address of IPw-TX4.

ii. 2 languages supported for IP Installer：
   a. IPInstallerCht.exe: Chinese version
   b. IPInstallerEng.exe: English version

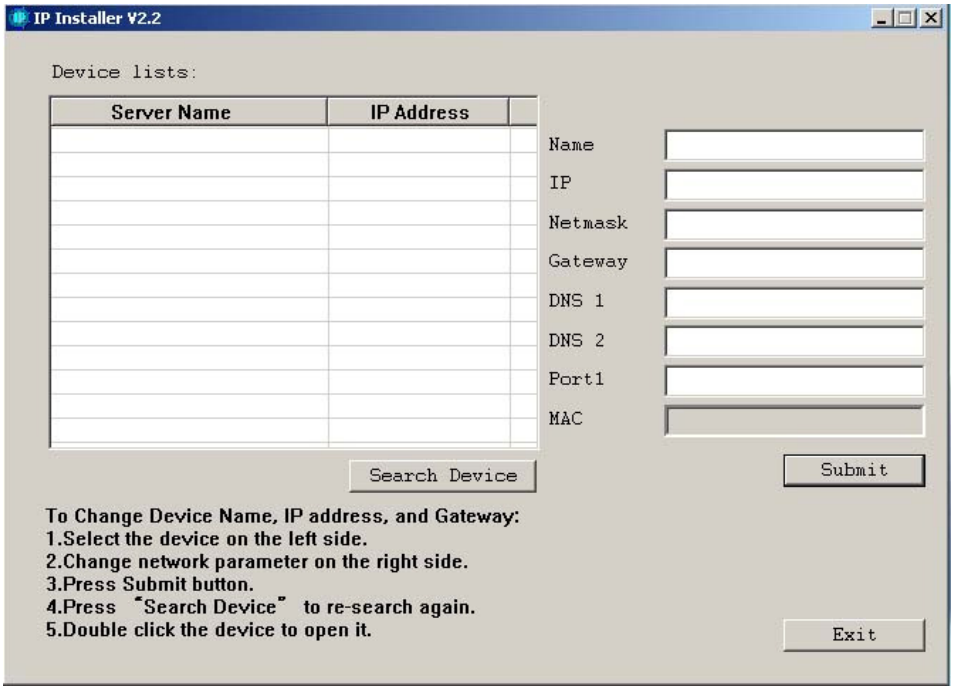
iii. 3 different IP configurations based on different environments.
   a. Fixed IP (Public IP or Virtual IP)
   b. DHCP (Dynamic IP)
   c. Dial-up (PPPoE)

iv. Execute IP Installer

v. Use Windows XP SP2 or newer version. If the following message popup, please click “Unblock.”

Windows Security Alert
To help protect your computer, Windows Firewall has blocked some features of this program.
Do you want to keep blocking this program?
Name: IPInstaller V2.1 Network Device Scan
Publisher: Unknown
Keep Blocking
Unblock
Ask Me Later
Windows Firewall has blocked this program from accepting connections from the Internet or a network. If you recognize the program or trust the publisher, you can unblock it. When should I unblock a program?

vi. The GUI of IP Installer：



vii. IP Installer searches all IP deceives which connect with the internet and it lists all of them on the left side or the user can click “Search Device” to search again.

viii. When the user clicks on each IP device listed on the left side of IP Installer, the network configuration of the IP device will show on the right side. The user can change the parameter and click on “Submit”. And, then, the following message will popup. Click on “OK” to reboot .

ix. After IPw-TX4 reboot, click “Search Device” to search. And use IE Browser for live viewing.

C. Install ActiveX control (setup once only):

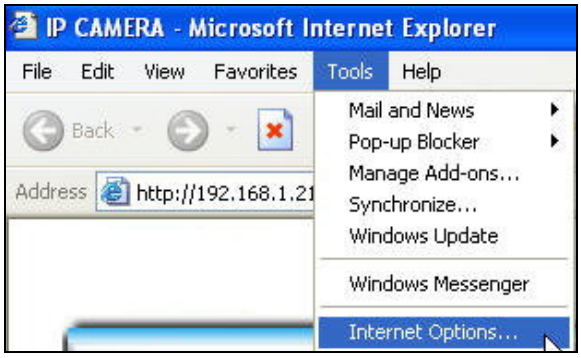
For the first time to view via IE browser, it will request the user to install ActiveX.

Also, check the security setting as follows.

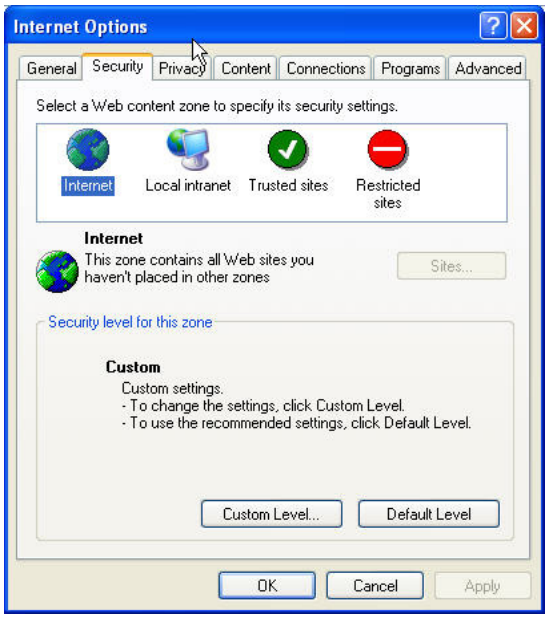
i. IE → Tools → Internet Options… → Security Tap → Custom Level → Security Settings →Download unsigned ActiveX controls → Select “Enable” or “Prompt (Recommend).

ii. IE → Tools → Internet Options → Security Tap → Custom Level… → Security Settings → Initialize and script ActiveX controls not marked as safe → Select “Enable” or “Prompt” (Recommend).

1

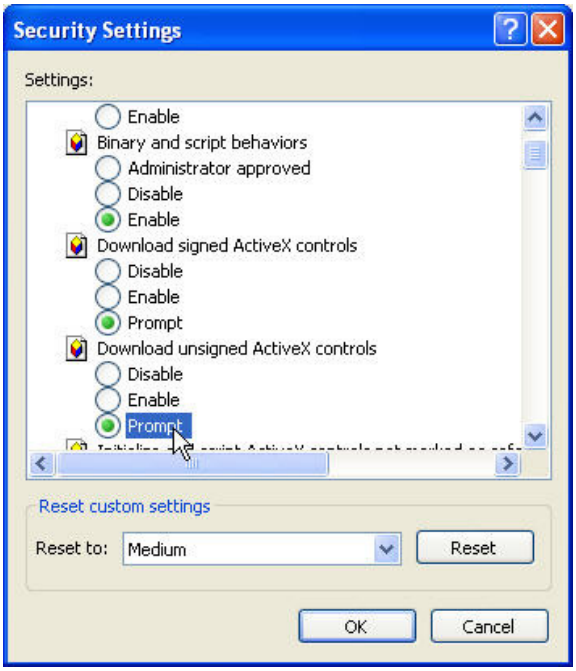


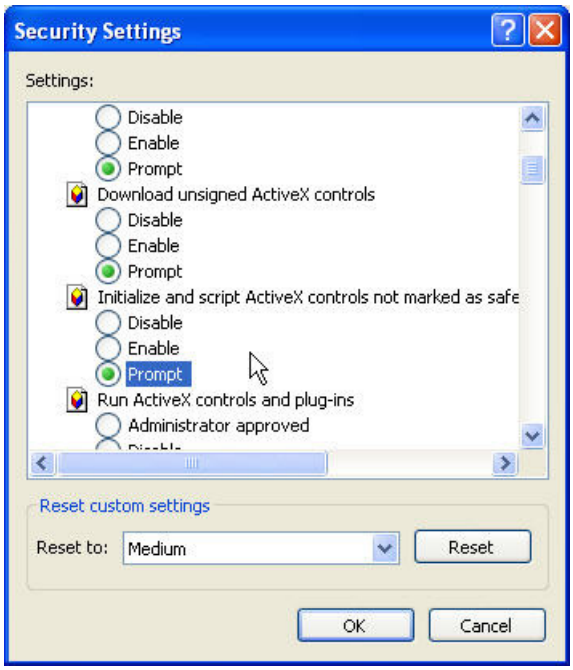
2



3

4





5

When popup the following dialogue box, click “Yes”.

III. Live Video

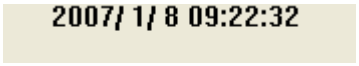
After executing IE browser and typing the IP address of IPw-TX4, the following message will popup and request the user to input the user name and password. The default user name and password are “admin” and “admin.”

2. ：Video Snapshot.
3. Live Video. The user can click on each channel for single channel format.
4. -supports 2-way audio. After click on “Chatting”, the user can use the microphone which connects with the PC to talk to the server side.
5. Status and Function keys：

   A · Monitor with full screen. Click on again to return normal mode.

   B · Record with AVI file.

   C · Select each channel to control.

   E · 

Date and Time displayed.

6. Relay Output Control.

7. PTZ control. When the user click on a certain channel and if it connects with PTZ camera, the user can click on “Model” to select protocols and use PTZ function to control the camera.

A. System

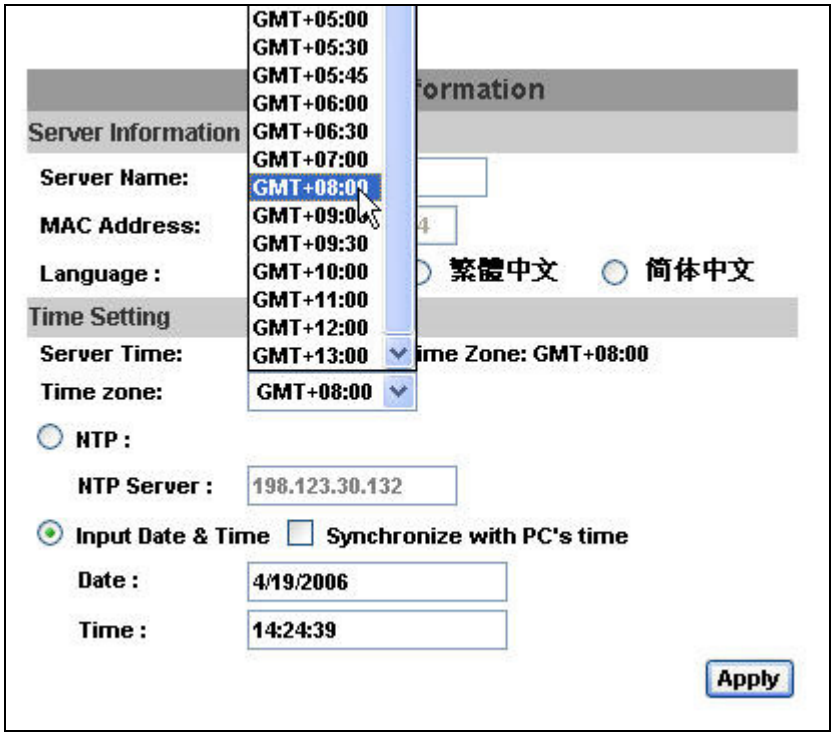
i. System Setup

Set up the video server name, select language, and the time on this video server.

a. Sever name：This is the video server name for the user to search on IP Installer.

b. Select language：There are English, Traditional Chinese, and simplified Chinese. When a certain language is selected, the following message will popup and ask the user to confirm language changed.

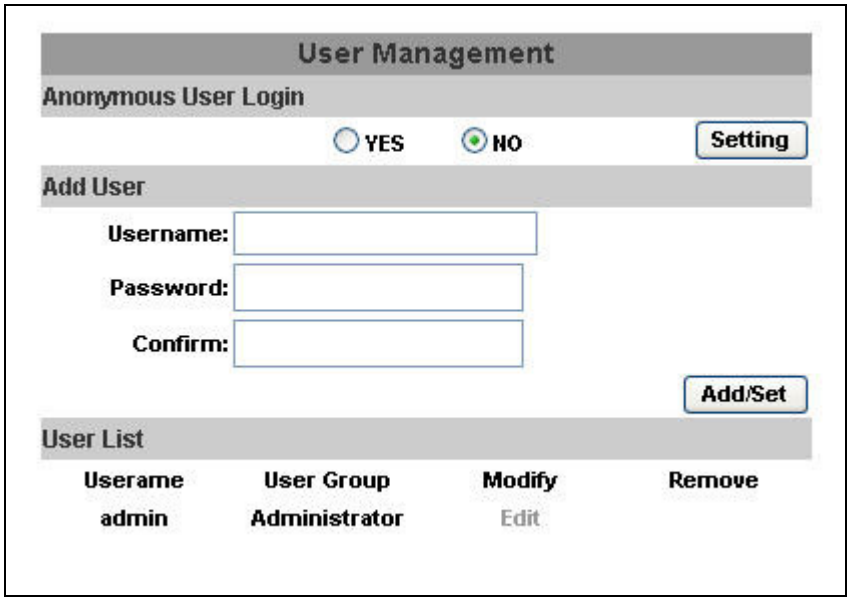
c. Sever time setting：Use NTP or Input Date & Time.



ii. User Management

Support three authorities: administrator (the highest), user, and anonymous user.

Default Username and Password: admin/ admin



a. Anonymous User Login：

Yes：Allow anonymous login.

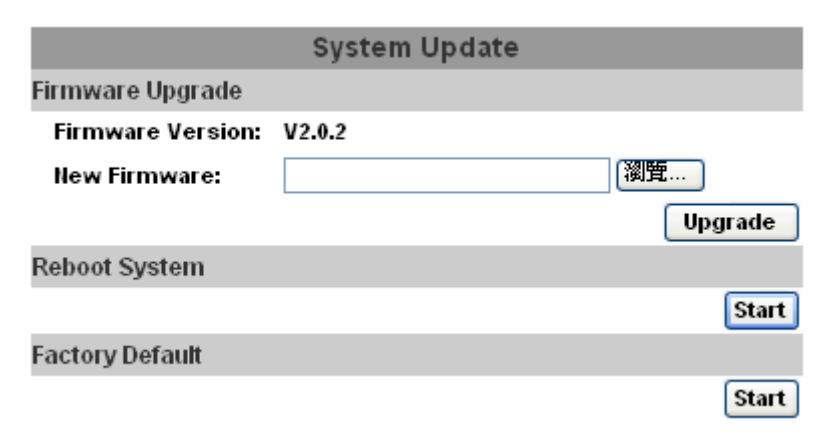
No：Require user name and password to login.

b. Add user：

Type the user name and password and then click on “Add/ Set”.

c. Click on “Edit” or “Delete” to modify the user.

iii. System update



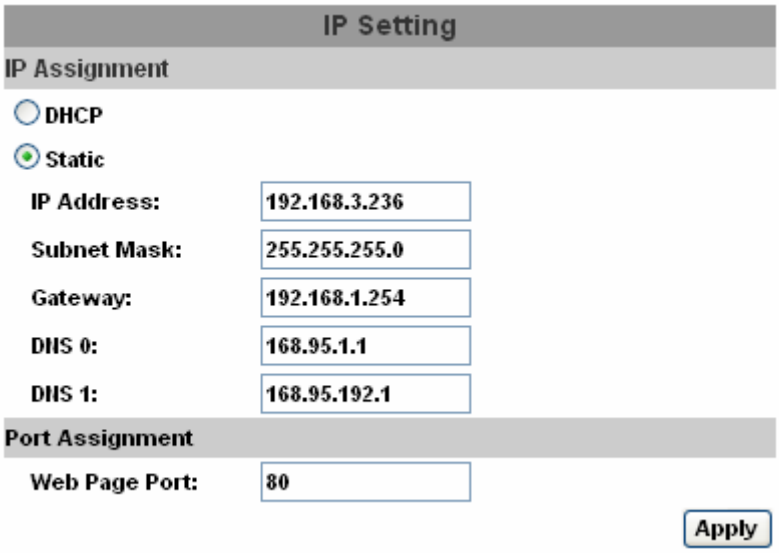
Update the firmware online. Click on “Browse…” to select the firmware. And then, click on “Upgrade.”

Other settings：
Reboot system：Reboot the video server.
Factory default：Recover all settings.

B.Network

i. IP Setting

supports static IP and DHCP.



a. DHCP：Use Dynamic Host Configuration Protocol to get all network parameters automatically.

b. Static IP：Type IP address, subnet mask, gateway, and DNS.

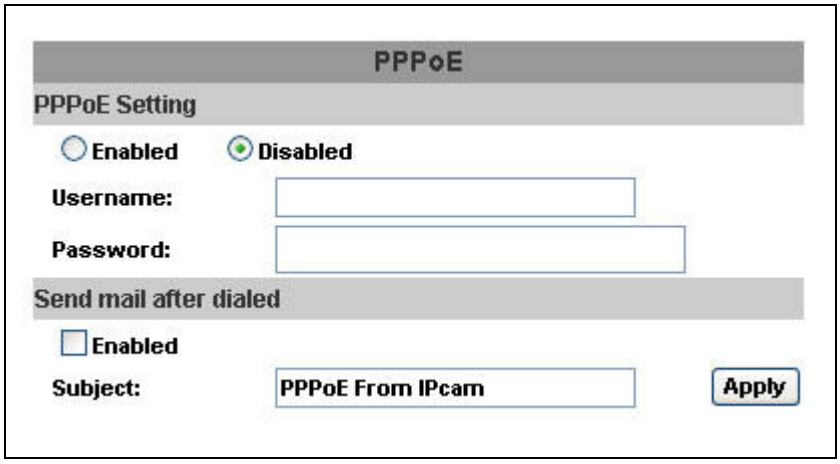
c. DNS：

With DHCP, DNS will be assigned automatically.

Static IP: Based on the network environment.

d. Port：If the user uses the router, some ports have to be adjusted in case of conflict.

ii. PPPoE



If the user wants to use ADSL, please select “Enabled”.

Username: username for ADSL connection.

Password: password for ADSL connection.

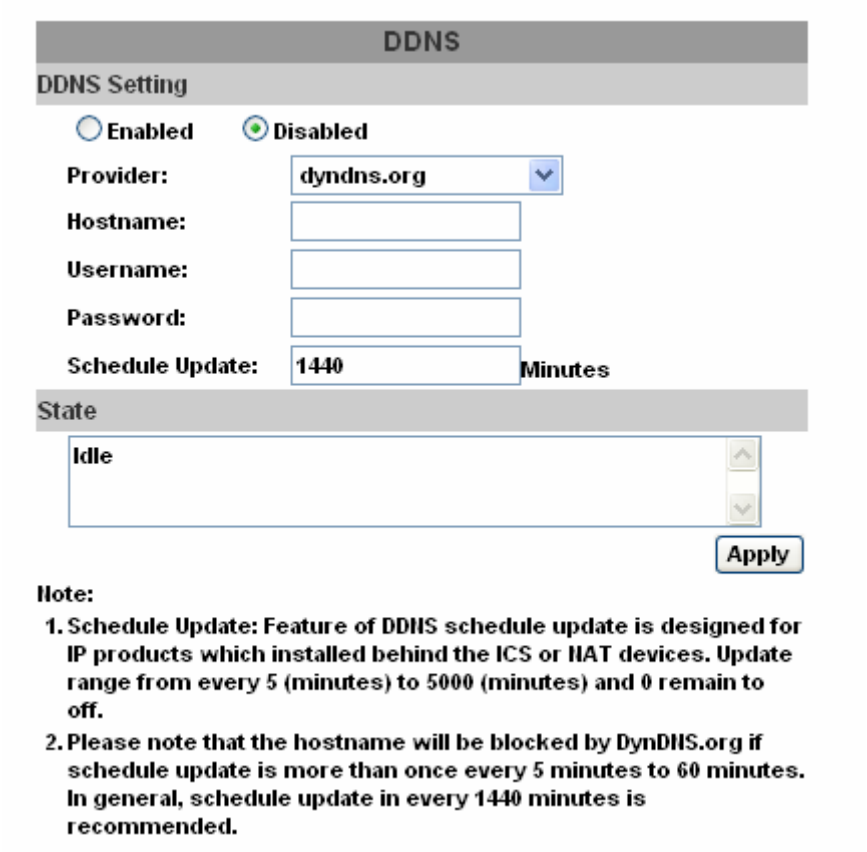
Send mail after dialed：After this function is enabled, it will send an email to a specific mail account. For the mail setting, please refer to IV. “Mail and FTP” settings.

iii. DDNS

Supports DDNS. It uses dynamic IP to redirect IP and connect with the video sever.

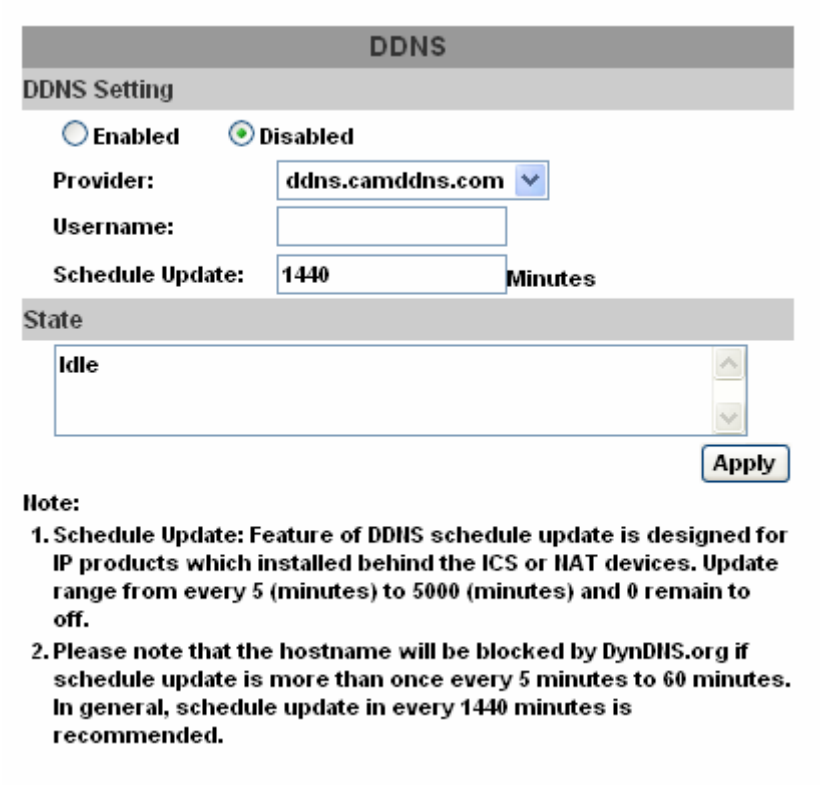
Supports 3 kinds of DDNS severs, including dyndns.org, ddns.camddns.com, and ddns2.ydsdvr.com.

a. DynDNS；


DDNS
DDNS Setting
Enabled
Disabled
Provider:
dyndns.org
Hostname:
Username:
Password:
Schedule Update:
1440
Minutes
State
Idle
Apply
Note:
1. Schedule Update: Feature of DDNS schedule update is designed for IP products which installed behind the ICS or NAT devices. Update range from every 5 (minutes) to 5000 (minutes) and 0 remain to off.
2. Please note that the hostname will be blocked by DynDNS.org if schedule update is more than once every 5 minutes to 60 minutes. In general, schedule update in every 1440 minutes is recommended.

1. DDNS Setting: Enable or Disable DDNS setting.
2. Input the DynDNS's host name, user name, and password.
3. Schedule Update: Default 1440 minutes.
   * dyndns.org: If the user's schedule update is too often, it will be blocked. Recommend the user to update once per day (1440 minutes per day).
4. Click on "Apply" to save.

b. Camddns：


DDNS
DDNS Setting
Enabled
Disabled
Provider:
ddns.camddns.com
Username:
Schedule Update:
1440
Minutes
State
Idle
Apply
Note:
1. Schedule Update: Feature of DDNS schedule update is designed for IP products which installed behind the ICS or NAT devices. Update range from every 5 (minutes) to 5000 (minutes) and 0 remain to off.
2. Please note that the hostname will be blocked by DynDNS.org if schedule update is more than once every 5 minutes to 60 minutes. In general, schedule update in every 1440 minutes is recommended.

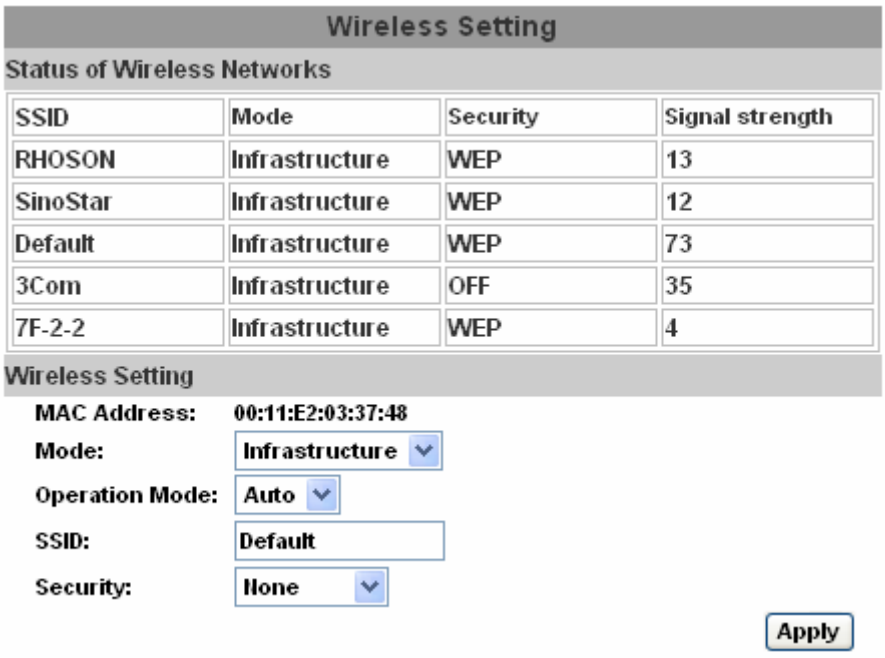
1. Input user name.
2. Schedule Update: Default 1440 minutes.
3. Click on “Apply” on save.

c. DDNS State：

1. Updating: Information updating.
2. Idle: Stop Service.
3. DDNS registration successful, can now log by http://<username>.ddns.camddns.com: Register successfully.
4. Update Failed, the name is already registered: The user name has already been used. Please change another one.
5. Update Failed; please check your internet connection: Network connection failed.

iv. Wireless Setting

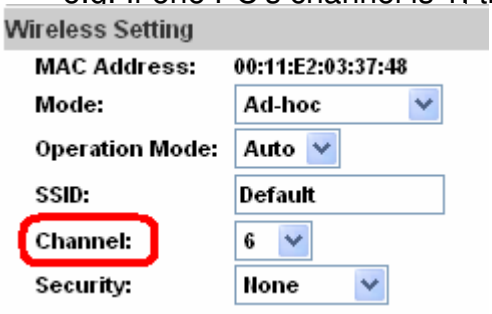
Supports 802.11b/g wireless connection. **(Notice: While using wireless setting, the user has to unplug Ethernet cable because both use the same IP. If the user doesn't unplug Ethernet cable, wireless setting can not be executed).**



a. Status of Wireless Networks；
it can scan all wireless services.

b. Wireless Setting：

1. **Mode**：There are Infrastructure and Ad-hoc. Infrastructure is for connecting with the router. Ad-hoc is for connecting with PC. When the user uses Ad-hoc mode, there is "Channel" to select. e.g. If one PC's channel is 1, the other's channel has to 1, too.

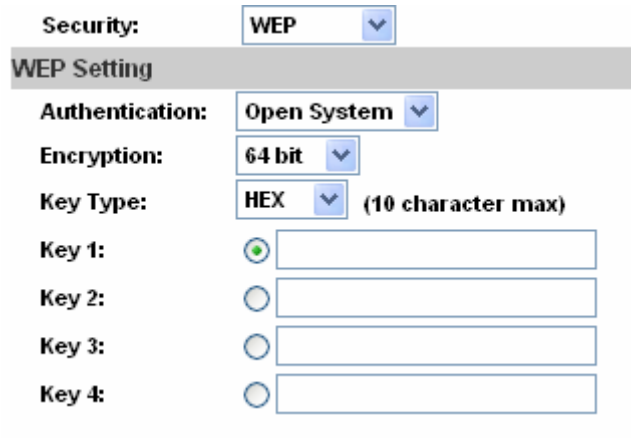


2. **SSID**：Based on AP setting.
3. **Channel**：This is only be used when the user selects Ad-hoc mode in order to avoid conflict.

4. **Security**：It supports “None”, “WEP”, “WPA-PSK” security encryption based on the setting of the Router.

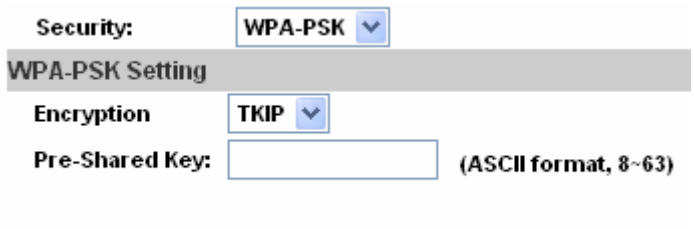
『WEP』

- Authentication：There are Open System and Shared Keys, it is based on different encryptions. This has to be the same as the Router’s setting.
- Encryption：There are 64 bits and 128 bits. This is based on Key Type based on the Router’s setting.
- Key Type：There are HEX and ASCII. When selecting HEX, the user only can input 0~9 characters and use A, B, C, D, E, and F. And, when selecting ASCII, the user can input any character. (case [upper cases/ lower cases] sensitive).
- Key 1~4：Based on Key Type to input characters.



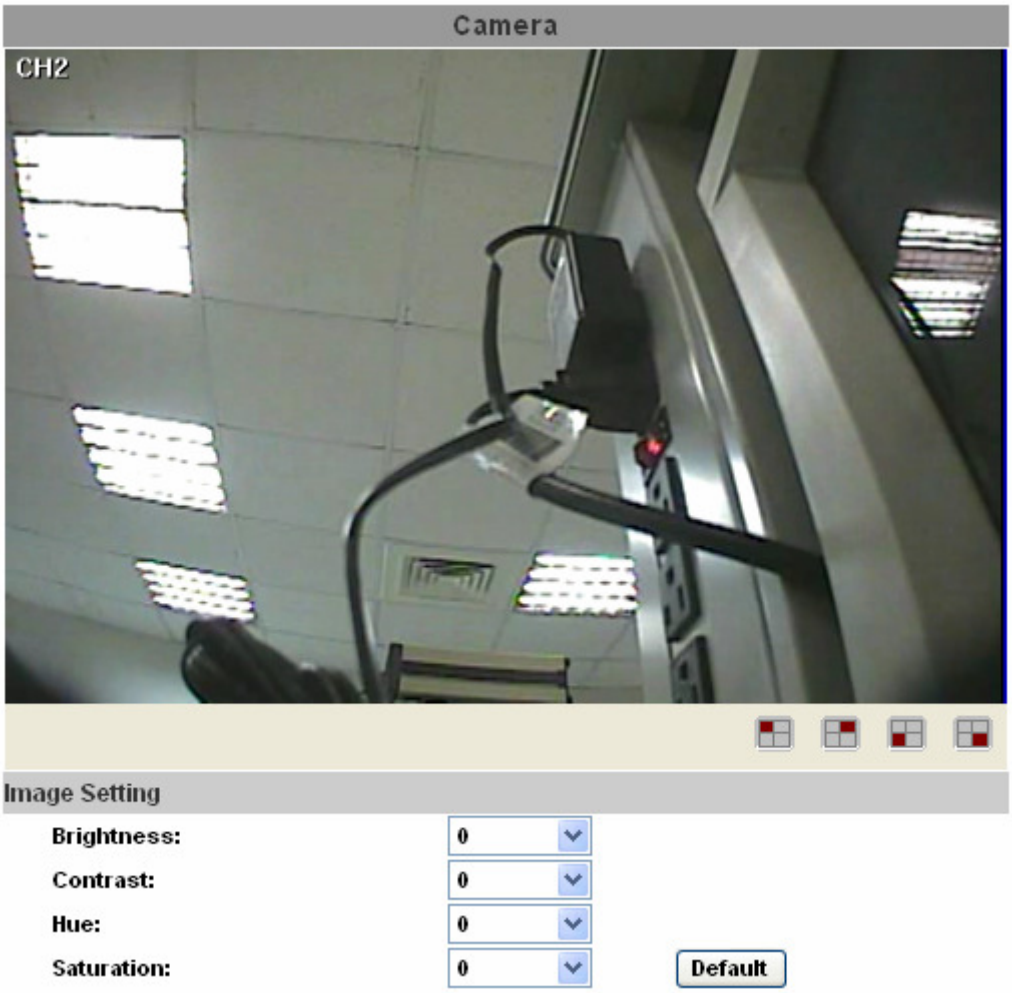
『WPA-PSK』：

- Encryption：There are TKIP and AES.
- Pre-Shared Key：Allow any characters (case [upper cases/ lower cases] sensitive).



C.Multimedia

i. Image Setting

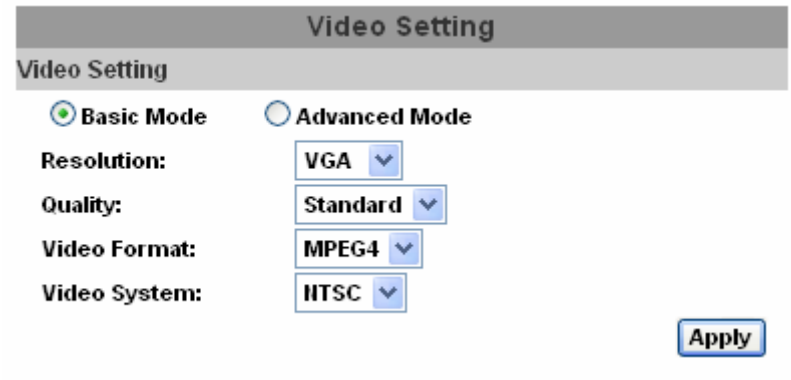


ii. Select each channel to control.

iii. Adjust “Brightness”, “Contrast”, “Hue”, and “Saturation”.

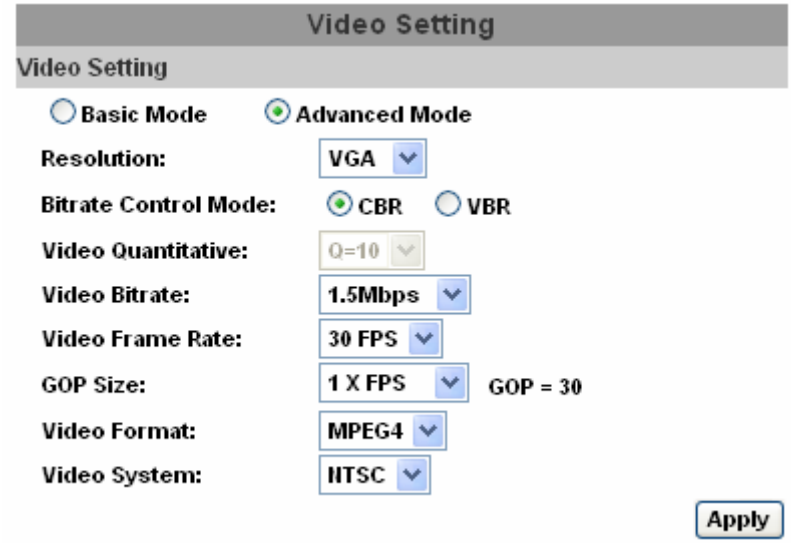
iv. Video Setting

a. Basic mode：



1. Resolution：
   There are 3 resolutions to be adjusted.
   VGA
   CIF
   QCIF
2. Quality：
   There are 5 qualities to be adjusted. The higher the quality is, the bigger the files size is.
3. Video System：
   It supports NTSC and PAL.

b. Advanced Mode：

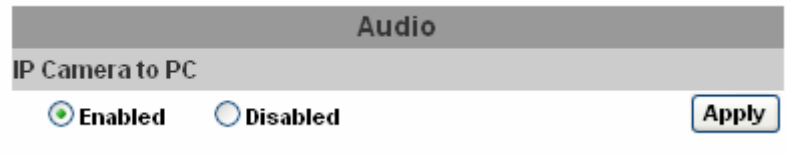


1. Resolution：
   There are 3 resolutions to be adjusted.
   VGA
   CIF
   QCIF
2. Bitrate Control Mode：
   There are CBR〔Constant Bit Rate〕and VBR〔Variable Bit Rate〕.
   CBR；64Kbps~4Mbps。
   VBR：Q=4~30。
   If the bandwidth is smaller than CBR or VBR setup, it will cause legging and incomplete images.
3. Video Frame Rate：
   The video refreshing rate per second. The highest Frame Rate is 30/ FPS.
4. GOP
   It means "Group of Pictures." The higher the GOP is, the better the quality is.
5. Video Format：It supports MPEG4.
6. Video System：It supports NTSC and PAL.

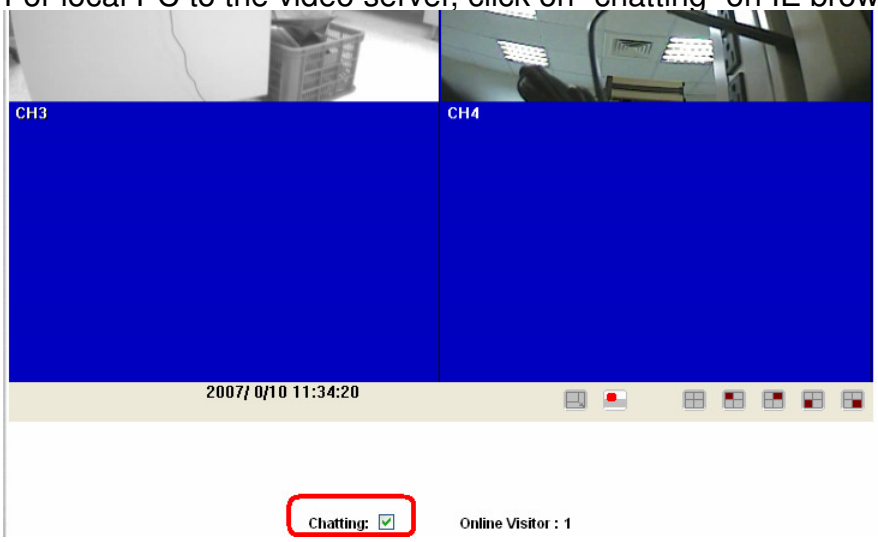
v. Audio:

2-way audio.

a. For the video server to local PC, select “Enabled” to enable this function.



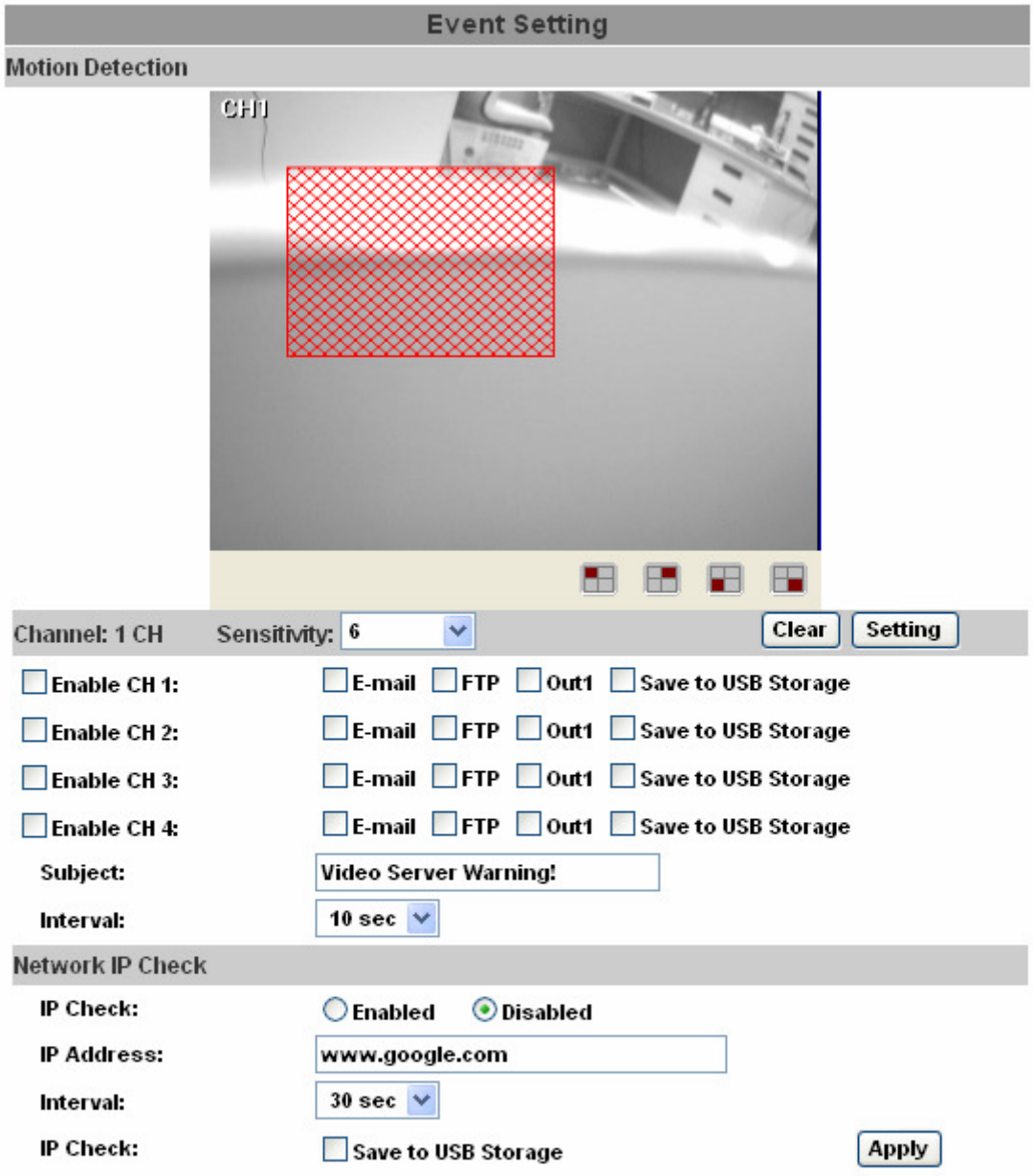
b. For local PC to the video server, click on “chatting” on IE browser.

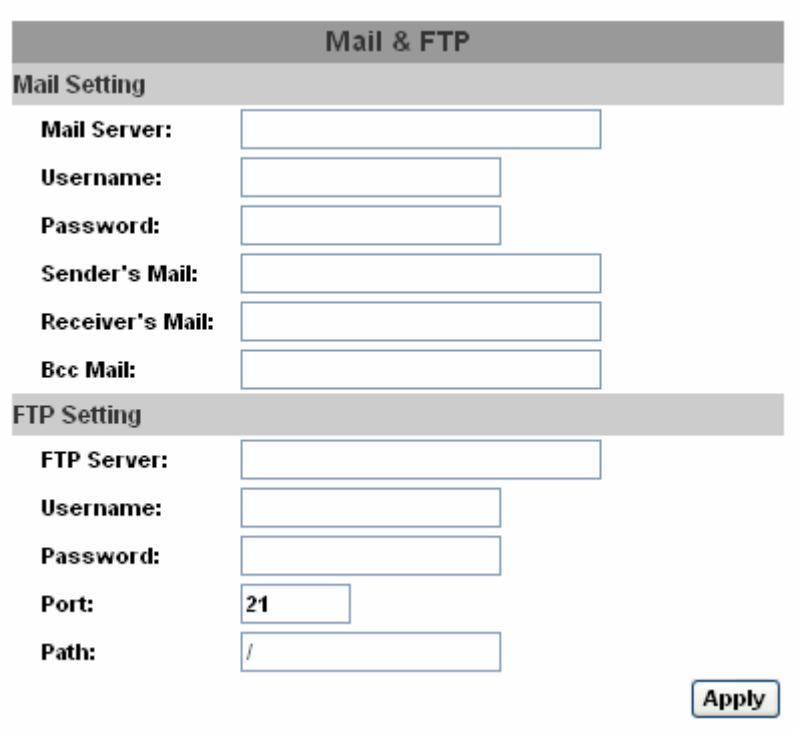


D.Event

Multiple event settings.

i. Event Setting



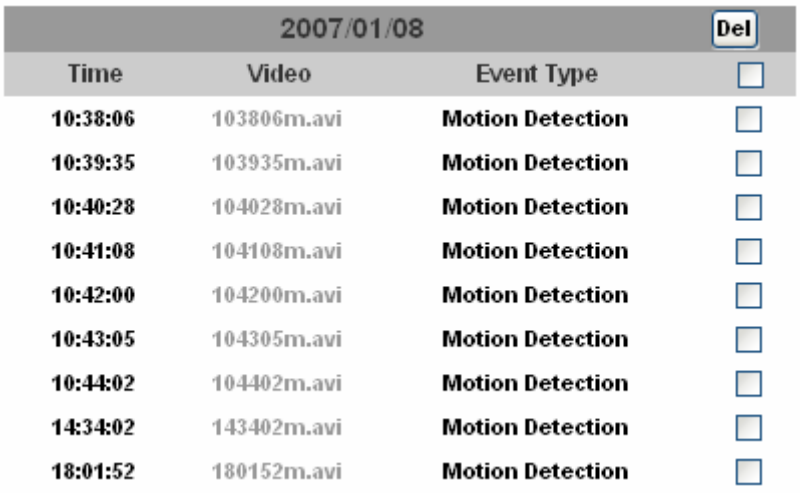


To send out the video via mail or FTP, please set up the configuration first.

iv. USB Storage

a. Playback

1. It will show the capacity of USB Device and the date of the video file. The user can choose a certain date to play back.



2. The video file is with AVI format. On the video, it will display the date of the video file and the event. The user can click on the

video file to play back on Microsoft Media Player.

3. To delete the video, check the video file and click on Del . When the USB device is full, it will remove the oldest video automatically.